

### LISTING OF THE CLAIMS

This listing of the claims replaces and supersedes all previous listings:

1. (Currently Amended) An automated method of classifying a cytological sample, comprising:

- a) obtaining an initial cytological sample from a patient;
- b) providing [[a]] ~~the~~ initial cytological sample in solution in a vessel;
- c) optically interrogating the solution ~~containing the initial sample~~ with at least one wavelength of light;
- d) determining, based on the interrogation, whether the solution containing the initial sample has an adequate concentration of cellular material;
- e) obtaining an additional cytological sample from the patient to be added to the solution if the solution containing the initial sample does not have an adequate concentration of cellular material;  
determining whether a result of said interrogation meets a criterion;
- f) attaching a positive designator to the ~~sample~~ vessel if the ~~result meets the criterion, wherein the positive designator designates solution containing the initial sample as~~ has an adequate concentration of cellular material and is satisfactory for preparing a specimen slide ~~from the sample~~; and
- g) attaching a manipulation designator to the ~~sample~~ vessel if the ~~result does not meet the criterion, wherein the manipulation designator designates solution containing the initial sample as requiring~~ has an adequate concentration of cellular material but requires a manipulation to render the ~~solution containing the initial sample adequate satisfactory~~ for slide preparation.

2-4. (Canceled)

5. (Currently Amended) The method of claim [[4]] 1, wherein the cellular ~~matter~~ material comprises prokaryotic, eukaryotic, or archae type cells.

6. (Previously Presented) The method of claim 1, wherein the positive designator indicates that the sample is satisfactory for automated slide preparation.

7. (Currently Amended) The method of claim 1, wherein the positive designator further indicates that the solution containing the initial sample is adequate in quantity to allow for withdrawal of a portion of the solution containing the initial sample sufficient for performing a diagnostic evaluation of prior to preparing the specimen slide.

8-9. (Canceled)

10. (Currently Amended) The method of claim [[9]] 1, wherein the ~~treatment manipulation to render the solution containing the initial sample satisfactory for slide preparation~~ comprises adding acetic acid to the solution containing the initial sample.

11. (Currently Amended) The method of claim [[9]] 1, wherein the ~~treatment manipulation to render the solution containing the initial sample satisfactory for slide preparation~~ comprises adding a reducing agent to the solution containing the initial sample.

12-13. (Canceled)

14. (Currently Amended) The method of claim [[13]] 1, wherein the ~~cells are cellular material is~~ endocervical cells.

15. (Currently Amended) The method of claim 1, wherein the ~~criterion is~~ solution containing the initial sample requires a manipulation to render the solution containing the initial sample satisfactory for slide preparation if a level of blood or mucus in the solution containing the initial sample exceeds a threshold level of blood or mucus.

16-20. (Canceled)

21. (Previously Presented) The method of claim 1, wherein the positive designator comprises a physical marking on the vessel.

22. (Original) The method of claim 1, wherein the positive designator comprises a designation in an electronic memory.

23. (Previously Presented) The method of claim 1, wherein the manipulation designator comprises a physical marking on the vessel.

24. (Original) The method of claim 1, wherein the manipulation designator comprises a designation in an electronic memory.

25-27. (Canceled)

28. (Currently Amended) The method of claim 1, wherein the initial sample is selected from the group consisting of blood; urine; semen; milk; sputum; mucus; plueral fluid; pelvic fluid; sinovial fluid; ascites fluid; a body cavity wash; eye brushing; skin scrapings; a buccal swab; a vaginal swab; a pap smear; a rectal swab; an aspirate; a needle biopsy; a section of tissue; plasma; serum; spinal fluid; lymph fluid; an external secretion of the skin, respiratory, intestinal, or genitourinary tract; tears; saliva; a tumor; an organ; a microbial culture; and an in vitro cell culture constituent.

29. (Currently Amended) The method of claim 1, wherein the sample solution comprises a water-soluble alcohol in an amount effective to preserve the sterility of the solution initial sample toward at least one contaminant.

30-38. (Canceled)

39. (New) The method of claim 1, wherein steps c) and d) occur in temporal conjunction with steps a) and b).

40. (New) The method of claim 1, wherein step e) occurs in temporal conjunction with steps a) through d).

41. (New) A method of determining adequacy of a cytological sample, comprising:

- a) obtaining an initial cytological sample from a patient;
  - b) disposing the initial cytological sample into a solution in a vessel;
  - c) optically interrogating the solution containing the initial sample with at least one wavelength of light;
  - d) determining, based on the interrogation, that the solution containing the initial sample does not have an adequate concentration of cellular material; and
  - e) obtaining an additional cytological sample from the patient,
- wherein steps a) through e) occur in temporal conjunction.